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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,917	09/26/2005	Shinji Omori	09792909-6248	1773

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EXAMINER

DANG, PHUC T

ART UNIT

PAPER NUMBER

2892

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/534,917

**Applicant(s)**

OMORI ET AL.

**Examiner**

Phuc T. Dang

**Art Unit**

2892

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on election filed on February 26, 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 051105
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

#### **DETAILED ACTION**

1. This application is a 371 of PCT/JP03/14460 filed on November 13, 2003.

#### **Election/Restrictions**

2. Applicant's election without traverse of Group I (claims 1-14) filed on February 26, 2008 and withdrawn Group II (claims 15-20) has been acknowledged and considered. Applicants have the right to file a divisional application covering the subject matter of the non-elected claims (claims ...).

Claims 1-20 are currently pending in the application.

#### **Oath/Declaration**

3. The oath/declaration filed on September 26, 2005 is acceptable.

#### **Priority**

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### **Information Disclosure Statement**

5. The office acknowledges receipt of the following items from the applicant:  
Information Disclosure Statement (IDS) filed on May 11, 2005.

#### **Specification**

6. The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### **Claim Rejections - 35 USC § 102**

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3 and 7-11 are rejected under 35 U.S.C. 102 (b) as being anticipated by Ando et al., hereafter "Ando" (U.S. Patent No. 5,989,759).

Regarding claims 1 and 7-8, Ando, in Figs. 19-21 and related text, discloses an exposure method comprising the steps of:

- measuring an image placement of a stencil mask at an inversion posture against an exposure posture;

- correcting the measured image placement with considering a pattern displacement caused by gravity at the exposure posture to prepare a first correction data based on a difference between a corrected image placement and a design data; and

- performing an exposure by deflecting charged particle beam, wherein electron beam is used as the charged particle beam, based on the first correction data to correct a position of a pattern to be exposed to a subject.

Regarding claim 2, Ando discloses wherein a transfer function indicating an interrelation of the pattern displacement caused by gravity at the exposure posture and the inversion postures is prepared by using a test mask in advance, and the measured image placement is corrected by

using the transfer function (see Figs. 19-21).

Regarding claim 3, Ando discloses wherein said mask is provided with a pattern for measuring a placement precision which differs from the pattern to be projected to the subject, and the step of measuring the image placement of the mask comprises measuring a position of the pattern for measuring the placement precision of the mask (col. 9, lines 16-27).

Regarding claims 9-11, claims 9-11 are rejected similar to claims 1-3 above.

8. Claims 1 and 9 are rejected under 35 U.S.C. 102 (d) as being anticipated by Hideyuki Minami (JP411265842A).

Regarding claims 1 and 9, Hideyuki Minami, in Abstract, discloses an exposure method comprising the steps of:

measuring an image placement of a mask at an inversion posture against an exposure posture;

correcting the measured image placement with considering a pattern displacement caused by gravity at the exposure posture to prepare a first correction data based on a difference between a corrected image placement and a design data; and

performing an exposure by deflecting charged particle beam based on the first correction data to correct a position of a pattern to be exposed to a subject.

#### **Allowable Subject Matter**

10. The following is a statement of reason for the indication of allowable subject matter:

Claims 4-6 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is 571-272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thao X. Le can be reached on (571) 272-1708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and Final communications.
13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Phuc T. Dang/Phuc T Dang/

Primary Examiner, Art Unit 2892